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ABSTRACT

Fitting educational research to Latin America's developmental needs is a political issue involving differences in perspectives of Latin American and United States researchers, Latin American governments, and agencies concerned with development outside Latin America. A comparison of ERIC's "Current Index to Journals in Education" with the Latin American system of REDUC and more briefly with the "Handbook of Latin American Studies" suggests differences in definitions of research problems as well as societal significance. Research in English tends to use a psychological paradigm, whereas the Spanish relies on a sociological one. Further, policies and perceptions of groups within international aid agencies vary; World Bank project officers, for example, usually form alliances with those within the borrowing country's educational system, thus excluding other groups from access to loans. Bank researchers, on the other hand, may have closer contacts with U.S. academic researchers than with officials in borrowing countries. Education in Latin America is centralized, as is all political life, and research programs usually are made to fit preconceived definitions of needs. Plans ignoring educational systems' political bases are likely to fail, just as U.S. research is unlikely to "fit" given definitions of Latin American needs, since such needs vary. What is called for is a participatory approach that acknowledges change as a multistage and multilevel process. (RS)

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DOES RESEARCH ON EDUCATION FIT THE DEVELOPMENT NEEDS OF LATIN AMERICA?

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April 1984

The question in the title of this paper has multiple answers. They depend on the meanings assigned to the terms "development" and "research." Those meanings vary according to the interests, and views of reality, of the persons or groups involved. As a consequence, research that "fits" according to one group, may be considered inappropriate for another.

The process of "fitting" research to development needs is not, therefore, merely a technical process. It is instead a political process, in which technical means are used to pursue objectives in a context of competition in which not all groups will benefit equally from the outcome. Perhaps all research has some basis in values, but research for development is especially political because by definition it is concerned with the transformation of economic and social structures.

It would be more accurate, therefore, to talk of research that fits the needs of particular actors by assisting them in the pursuit of their objectives. In a situation in which objectives are not shared, the research outcome that fits one actor might well pinch others. Especially in societies in which resources allocated to education are severely constrained, research results that justify the actions of one group often are used to deny the validity of others' claims. The legitimacy assigned to "scientific research" makes it an

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important tool in the normal process of struggle in bureaucratic organizations as well as political systems.

This paper is a brief exploration of the variety of actors that should be included in a study on the fit between research on education and development needs in Latin America. The objective of the paper is to demonstrate variations in perspectives on development and educational research across these actors, and some of the consequences of those variations in the production and utilization of educational research.

Organization of the Paper

For the purposes of this analysis, the various actors can be arranged in four major categories. These are: researchers in the United States; researchers in Latin America; agencies outside Latin America concerned with development; and governments in Latin America.

Within each category there may be several sets of actors. For example, researchers in Latin America include those employed by the government, and those in private or university research centers. The international development agencies include, among others, the World Bank, the InterAmerican Development Bank, the United States Agency for International Development (AID), to name just a few.

It is also possible to differentiate within some of the sets of actors. For example, the paper will discuss briefly how the structural position of persons within governments and development agencies affects their view on research and development needs. Further differentiation is possible--Cohen and Reiff (1984) for example have shown that it is useful to distinguish between sponsors and users of research. For the purposes of this paper, it will be enough to show that the question of fit is highly complex, and

politically, rather than technically, determined.

There are three parts to the analysis. First, the paper compares research produced in North America--on education in Latin America--with that produced in Latin America. The objective of the comparison is to determine if North and Latin American researchers differ in their choice of research topics, and in their choice of research methodologies. Differences will be explained in terms of objectives and ideologies of the two groups.

A second part of the paper analyzes some aspects of the use of research by the World Bank, as an example of an international development agency. It comments on the fit between the degree of consistency between Bank policy with respect to loans in the education sector and actual lending. Inconsistencies could be taken as evidence that the process of definition of "development needs" by the Bank is influenced by organizational structure and objectives as well as by technical factors.

Third, the paper will describe some aspects of research use in the policy making process in ministries of education in Latin America. Do actors use the research that is available? What kind of research, by whom, is most likely to be used?

The paper concludes with brief comments on the implications of the findings of this paper for choice of research methodology. If the process of fitting research to development needs is primarily political, then the technical means adopted must permit the inclusion of political information. Research that relies exclusively on conventional, "value-free" methods is less likely to be useful to any set of actors engaged in the struggle for development.

Research on Education in Latin America by North Americans and by Latin Americans

This section of the paper is a comparison of the CIJE Index of ERIC with a bibliographic system developed in Latin America. The topic is research on education in Latin America. The point of the comparison is to determine if there are differences in the coverage provided by the two bibliographic indices. We will also make a brief comparison with the Handbook of Latin American Studies, which each two years publishes short abstracts of documents on education in Latin America that are received by the Library of Congress.

This section can be read as a comparison of "known" research on education in Latin America produced by North Americans, with that "known" research produced by Latin Americans. More correctly stated, it compares research published and/or distributed in the United States with that published and/or distributed in Latin America. But only a tiny proportion of the research published in the United States is done by Latin Americans, just as very little of the research published in Latin America is done by North Americans.

Certain liberties have been taken with the concept "research." No effort has been made to distinguish between reports of quantitative research, statistical reports, essays, policy documents or other forms of conveying information or opinion. The description of "research" production that follows is based on bibliographic indices and abstracts that do not always provide enough information to classify items according to their match with a definition of "research." From casual inspection it is clear that perhaps 60 per cent of the Latin American production, and about 40 per cent of the North American production, are not reports of data collection or analysis. About an equal percentage--some 30 per cent of the total--might be considered

"quantitative" research reports. Whether this collection would meet the academic methodologist's definition of "research" or not, it is documents of this kind that are read and which shape the knowledge and practice of users in development agencies and governments.

A demonstration of major differences in the content of the three bibliographic sources consulted would suggest two major implications. First, differences in frequency of various kinds of research done and methods used would suggest differences in the definition of problems of educational research. Second, differences would suggest that educational research has a different social significance in Latin America than in the United States. Both implications are important for understanding the problem of fitting research to development needs.

Sources and Method

The source for Latin America (Spanish and Portuguese documents) is an index of more than 3000 bibliographic items compiled by the Latin American Network for Documentation in Education (REDUC), an association of 17 research centers located in 15 countries in Latin America. Only four of the centers are attached to universities, another three are linked with ministries of education. The others are private(1).

The REDUC index lists both published and unpublished material. The several kinds of published documents are books, monographs, government reports, and articles in journals. There are 15 journals of education in Latin America that publish on a regular basis (Schiefelbein, 1982). Books and monographs are published commercially, and by government, university and private research centers. The index also includes annual reports of international

agencies and government ministries, proceedings of meetings, and unpublished papers. About 30 per cent of the material is similar to that in the non-published documents file that is part of the ERIC system.. The remainder might be considered "publications" though only a small fraction (20 %) are journal articles.

The REDUC contents were compared with the published materials in ERIC known as the Current Index of Journals in Education (CIJE). The CIJE file was searched using as keywords "Latin America", and the names of all countries (excluding Puerto Rico), for the years 1970 and forward. This produced about 1300 entries from which were eliminated about 500 that had been published in Spanish, or did not refer to education or children. All the U.S. entries are "published" in the sense of having appeared in some journal, although some of those journals may have a more limited circulation than non-published working documents in Spanish.

The documents in REDUC and CIJE were coded by the authors--on the basis of their title, the abstract (in the case of CIJE), or knowledge about the research--into seven categories. First, an effort was made to fit the document into one of the five categories referring to level of the system studied in the research. All studies that referred to infant development, nutrition, all forms of pre-school experience, and elementary or primary school were placed in the first category. All references to junior or senior secondary school, or teacher training institutions, or to adolescents in general, were put into the second category(2). In the third category were placed all documents that refer to technical training outside of formal schools, such as worker training programs or employment-specific adult education programs. The fourth category included all studies referring to post-secondary and higher education. Finally, all studies that referred to community

development, popular education, nonformal education or adult education were included in the fifth category. Documents that referred to two levels (e.g., primary and secondary, were included in the higher level). Documents that referred to more than two levels were not assigned to any level. Check-coding was done at regular intervals to maintain agreement above 90 per cent.

An effort was made to find categories that would distribute some of the more than 30 per cent of the documents that could not be classified by level. Only one category could be developed that would include more than 5 per cent of the total. This is a category that includes all documents referring to economics of education, educational finance, costs of education, income distribution effects of education, and any reference to educational planning, that had not been previously coded. Lumped into the "others" category because the percentages were considered too small, were studies on the ideological premises of education, history of education, educational technology, research on research, and other topics.

Results

The major findings are presented in Tables 1 and 2, which compare the distribution of "research" on education in Latin America from the two sources. Table 1 provides a breakdown by year from 1970 to 1981, and a distribution by topic for each source. The production of writing on education in Latin America has been slightly greater in Spanish than in English. Even if we add to the CIJE total of 806 publications the 900 documents found in the ERIC (some of which are identical with the published papers), we see that there is more "information" available in Spanish and Portuguese than in English.

The real difference may be even greater. The REDUC total of 1909 documents does not include another 600 that have been catalogued by

Table 1. Percentage Distribution of REDUC and CIJE Files by Topic and Year

Year and Index

Topic	1970 REDUC	1970 CIJE	1971 REDUC	1971 CIJE	1972 REDUC	1972 CIJE	1973 REDUC	1973 CIJE	1974 REDUC	1974 CIJE	1975 REDUC	1975 CIJE	1976 REDUC	1976 CIJE	1977 REDUC	1977 CIJE
Pre-School, Primary	15	8	26	10	18	11	15	10	9	20	17	11	14	8	16	13
Secondary, Normal	15	13	14	6	8	7	6	8	6	12	5	11	5	11	4	16
Technical, Vocational	8	8	6	5	3	5	3	3	8	3	12	2	9	6	11	6
Higher Education	10	8	17	8	13	14	25	16	22	12	22	25	16	19	13	20
Adult, Popular	10	18	3	10	16	7	9	8	13	6	5	10	7	6	13	6
Economics, Finance, Planning	8	3	5	5	8	4	15	6	12	6	7	6	19	5	12	7
Others	35	42	29	56	34	52	26	58	29	23	32	33	32	45	44	32
TOTAL	40	38	70	62	134	56	140	80	178	64	178	79	152	62	171	70

Topic	1978 REDUC	1978 CIJE	1979 REDUC	1979 CIJE	1980 REDUC	1980 CIJE	1981 REDUC	1981 CIJE	TOTAL REDUC		TOTAL CIJE	
Pre-School, Primary	15	22	14	18	16	18	8	26	281	14.7%	115	14.3%
Secondary, Normal	5	7	4	8	7	7	8	9	114	5.9	76	9.4
Technical, Vocational	11	1	12	5	12	7	25	2	187	9.8	31	3.8
Higher Education	13	9	13	20	8	16	5	22	286	15.0	139	17.2
Adult, Popular	14	9	16	2	14	10	22	12	234	12.3	76	9.4
Economics, Finance, Planning	6	4	6	5	7	7	2	3	168	8.1	43	5.3
Others	36	48	34	42	37	35	31	26	639	33.5	327	40.0
TOTAL	338	98	255	79	197	61	74	65	1989		886	

the member centers of REDUC rather than by the central office. The collection was not begun until 1972, so that the REDUC totals for 1970 and 1971 are those materials that could be recovered retrospectively. REDUC says that is has a backlog of another 3000 items yet to catalog, which is why the totals for 1980 and 1981 tail off. It would appear that the annual production of documents about education in Latin America is increasing, while that of published papers in English has remained constant for the past 10 years(3).

The CIJE collection had proportionately more studies coded in "Others," "Secondary and Normal," and "Higher Education," while the REDUC collection had more studies proportionately coded in "Technical-Vocational", "Adult and Popular" education, and "Economics and Planning." The differences are not large in numerical terms, but they refect some important differences between U.S. and Latin American researchers and writers about education, with respect to what should be written.

These differences are especially clear if one considers how these interests have been changing over time. Over a 12-year period the averages of the two sources might look similar, although they are going in different directions. To make the time comparisons easier, one can compute a three-year "rolling average" that smooths out variations of individual years yet shows the general trend. The most dramatic differences are with respect to the categories of Technical-Vocational Education, and Economics-Planning. Attention in the CIJE source stays relatively constant for both, declining slightly in the middle of the period., Attention to Technical Education in the Spanish-Portuguese source, however, climbs from slightly above 5 per cent to over 15 percent. Attention to Planning in the Spanish-Portuguese source reaches a peak of almost 13 per cent in the

Table 2. Percentage Distribution of Research by Country for Three Time Periods, REDUC and CIJE Indices

Country	Year and Index							
	1970-1974		1975-1978		1979-1981		TOTAL	
	REDUC	CIJE	REDUC	CIJE	REDUC	CIJE	REDUC	CIJE
Argentina	8	2	5	3	6	2	6.5	2.3
Bolivia	2	2	3	2	2	-	2.4	1.7
Brazil	12	16	15	20	10	14	13.3	16.7
Colombia	8	7	8	5	5	5	7.7	5.7
Costa Rica	4	3	1	3	7	4	3.3	2.9
Cuba	-	8	1	8	-	10	0.8	8.4
Chile	35	9	27	2	37	2	31.8	4.3
Ecuador	2	1	4	2	3	-	2.9	1.2
El Salvador	3	2	2	-	2	-	2.6	1.1
Guatemala	1	5	2	2	-	2	1.8	2.9
Jamaica	-	7	-	8	0	10	0.3	8.4
Mexico	3	16	6	21	6	24	5.1	20.4
Nicaragua	-	1	-	2	-	5	0.3	2.5
Panama	2	1	2	-	-	-	1.9	0.8
Paraguay	-	1	3	-	5	-	2.1	0.8
Peru	6	8	6	9	3	7	5.5	8.1
Uruguay	-	1	2	-	2	2	1.4	1.8
Venezuela	9	4	8	5	9	6	8.4	5.2
Other L.A.	1	1	1	-	1	-	1.2	0.9
Other Caribbean	0	4	1	6	-	4	0.5	4.7
TOTAL	547	194	736	237	254	221	1537	652

-= less than 1%
Other L.A.=Dominican Republic, Honduras
Other Caribbean=Barbados, Belice, Guyana, Haiti, Trinidad and Tobago

middle of the period.

One plausible explanation for the differences between the indices with respect to coverage of topics, are their differences with respect to coverage of countries. Over the short term the educational history of the countries in Latin America has varied considerably. Some went through major educational reforms during the ten-year period, while others suffered serious cutbacks in spending on education. There have been some dramatic changes in ideology of the governments. If the indices vary in attention to countries they would then be expected to convey different impressions of education.

Table 2 presents the distribution across countries for the two indices, grouped by period, 1970-1974, 1975-1978, and 1979-1981. The REDUC Index includes proportionately more documents from Chile, than does the CIJE. Brazil, Venezuela, Colombia and Argentina follow in the REDUC file, while the sequence for the CIJE is Mexico, Brazil, Cuba, Jamaica, with Colombia and Venezuela following and Argentina far behind. Guatemala and Costa Rica appear more often in educational research published in English than does Argentina, a country with a much more sophisticated culture and level of development.

There are technical explanations for some of the differences. The REDUC file was originated in Chile, and might be expected to have done a more thorough job of collecting documents from that country than from others(4). Mexico publishes the leading educational research journal in Spanish, and for that reason may have made less effort to connect with the Chilean bibliographic service. The English-speaking Caribbean countries could be expected to be under-represented in the REDUC system.

The Table also suggests that the distribution of research reports has changed somewhat over the 12 year period, for some countries.

Research published in English on Cuba is slowly increasing, especially after the U.S. government removed restrictions on travel to Cuba. Research on Chile, on the other hand, declined after the 1973 military coup. Research on Nicaraguan education has increased since the triumph of the Sandinista forces over the Somoza dictatorship in 1979. Research in other Central American countries appears to be falling off, especially in El Salvador which in the early 1970s received much attention because of its educational reform and use of educational television. Of special interest is the increase of research published in English about education in Mexico. The Mexican educational system differs in significant ways from other Latin American countries(5), but its proximity, internal stability, and favorable currency exchange rate may make it an attractive research site for North Americans.

The Spanish-language REDUC index gave proportionately more attention to research and publication on technical and vocational training, educational planning and the economics of education, and adult education. Interest--as reflected in publications--in technical training and adult education is increasing in Latin America, while attention to planning and economic questions is declining. On the other hand, the CIJE shows a increase in interest in primary education among those who publish in English. Attention to higher education is also higher with the difference growing larger.

Another source of bibliographic information about "research publications" on education in Latin America is the Handbook of Latin American Studies, which publishes on alternate years a review of publications received by the Library of Congress that pertain to education in Latin America and the Caribbean. In a recent review of the last 7 numbers of reviews (1969-1981) Egginton (1982, 1983a,

1983b) suggests that the Handbook's bibliography could be close to being a complete census of all relevant material. On the other hand, the Handbook reviewed 2648 documents published since 1960. That is more than the total of the REDUC index, but REDUC claims to have another 3000 documents yet unclassified from the same period. Even if only a third of the Spanish documents should be called either research or publications, it would seem that the Handbook's collection is not uniquely exhaustive.

The Handbook collection includes much more material on Brazil than is available in either the REDUC or CIJE files, a total of 912 publications, or 34.5 per cent of the documents. Mexico ran a poor second with only 6.9 per cent of the total. Furthermore, 82.4 per cent of the Handbook collection is about South America, as compared to 83.4 per cent of the REDUC Index, but only 50.9 per cent of the CIJE file.

The Handbook's summaries allow reviewers to comment on the characteristics of the publications being reviewed, and therefore reveal not only what is going on in Latin America, but also what attracts the attention of reviewers (generally North Americans). For example, Egginton notes that Handbook "no. 31 (1969) bemoaned the lack of attention to the influence of formal schooling on such diverse areas as learning, mobility, development, and recognition of national needs" (1982, p. 120). There was a brief spate of attention in the Handbook to "radical literature" in the 1971 and 1973 issues, that declined afterward. By 1975 the discussion was about "whether education retards or promotes development and social change" (1982, p 121). "Elementary education was not a particularly popular topic despite its virtually universal reach" (1982, p. 127). Perhaps more importantly, Egginton observed that from issue to issue countries and

topics would appear and disappear.

Comments

Our concern here should not be which bibliography is the "true" one, but rather to understand the kinds of distortions that are present, and the particular insights that are unique, in each collection. Not captured in the tables but obvious in the readings of titles, sources of publications and abstracts, is the fact that documents in Spanish and Portuguese are more often generated by government research centers, or private centers working on contracts for ministries of education, while the reports in English are more often the work of individuals in universities with foundation or U.S. government financing.

North American researchers enjoyed more autonomy in selection of topics in the early 1970s than at present. Both the foundations and USAID provided block grants with few restrictions. Today researchers must compete for scarce funds often attached to performance contracts linked to U.S. policy. On the other hand, researchers in Latin America, previously financed by U.S.-based foundations and to some extent by USAID now have access to a broad set of funding agencies. Schiefelbein (1983) reports that 20 UN agencies, 8 regional organizations, 10 donor agencies and 13 private organizations have developed overlapping networks that fund and disseminate research. This is in addition to funding by the various governments. Cohen and Reiff (1984) describe a process of competition among sponsors, the outcome of which determines the particular research outcomes that then can influence perceptions of development needs. King (1981) has commented that

> "There are obvious dangers in the fact that relations between (developing country) recipients and donor agencies are much more highly personalized than between research councils and academics

> in North America and Europe. The predominance of informal networks effectively acts as a selection device, but the process may throw up a small international research elite who act as 'translators' or 'brokers' between outside funds and local institutions (1979, p.252)."

That "elite" defines development needs and research priorities according to their ideology.

The English-language research reviewed in the CIJE file more often uses a psychological paradigm--it is concerned with issues of learning, methods of teaching, questions of motivation, nutrition, encouragement from parents and the like. The Spanish language research, on the other hand, more often is pitched at a sociological level of analysis, or uses a non-behavioral idealist or existentialist paradigm. Many more of the REDUC documents deal with questions of education and society, broad philosophical themes, issues of ideology, or the organization of a system. The Latin American research is more often "critical," when it is done by persons outside of the government, or "policy oriented" when it is done by a government agency or contractor. The CIJE articles, on the other hand, less frequently are "critical," more often are descriptive or hypothesis-testing.

Summary

The review of the three bibliographies serves two major purposes. First, the points of agreement between the three can be used to indicate what researchers--Latin American and North American--have considered as the most important (research) topics in the educational systems of the various countries. Higher education is clearly most important in all three sources. Primary education receives less attention. As we will seem this relative emphasis fits the definition of development needs found in the practice (but not necessarily the policy) of the development agencies.

Fitting Research to Development Needs in International Development Agencies

There may in fact be as much variation between policies of international aid agencies as between the educational needs of the various countries in Latin America, or between researchers in the North and in the South. Some of the differences are the result of implicit agreement, as for example when USAID decides to emphasize aid to technical education, the InterAmerican Development Bank (BID) to focus on universities, and the World Bank to concentrate on basic education. These combinations are themselves subject to change, for the agencies' perception of education and development needs changes over time. In the early 1970s, for example, some of the development agencies became convinced that their mission should be to help the "poorest of the poor." The U.S. Congress amended the Foreign Aid bill to require USAID to focus on "women and the poor majority". The President of the World Bank instructed his organization to focus on issues of poverty and income distribution, and on basic human needs. Today both the U.S. and the World Bank have different presidents, and different definitions of development needs.

These definitions make up the ideology of the development agency. "Ideology" is used here to suggest that each agency must decide how it will define development, what kind of education it believes will contribute to that development, and what policies it believes will help produce that kind of education. The answers to these questions are based more on belief than on empirical knowledge; the agencies simply do not have the answers to the questions that must be given some response.

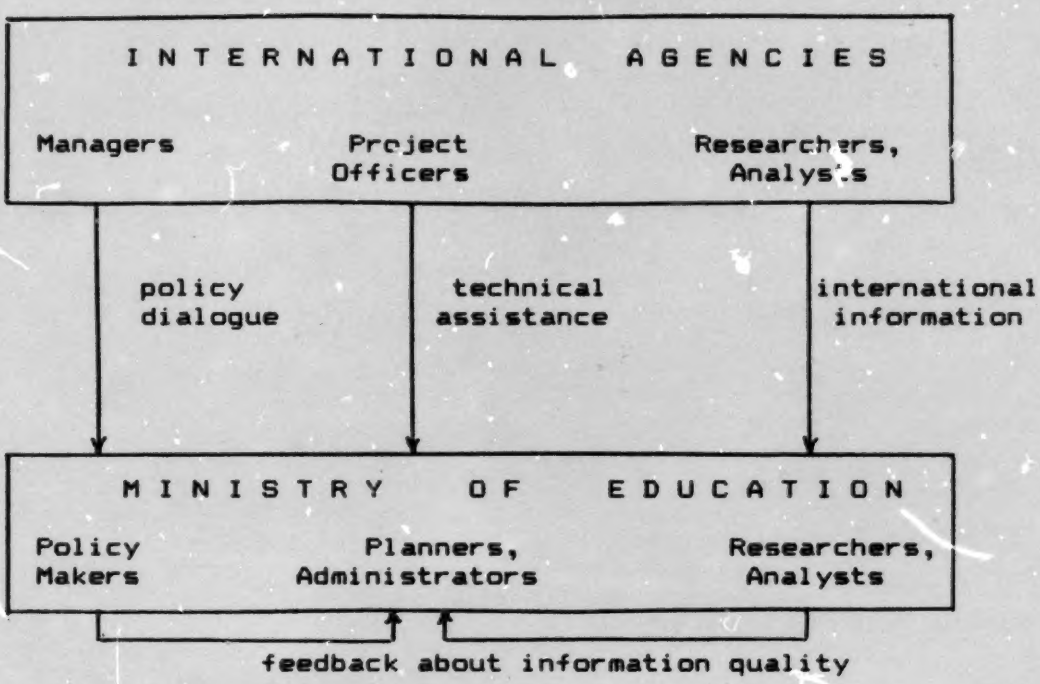
As Ayres (1983) points out with respect to the World Bank, there is an unwillingness to define these beliefs as "ideology".

> "In their (World Bankers') view, as expressed in repeated interviews, all of this is neutral. It is simply sound economic and financial management, technocraticaly orchestrated and applicable to any kind of economic system--be it capitalist, socialist, the 'third way,' or whatever (p. 74-75)."

This unwillingness to examine the empirical basis of views on education and development is probably common to all development agencies (as other human organizations). There are some criticisms of the World Bank's ideology with respect to education (Ahmed, 1977; Carnoy, 1980; Fernandez, 1981), but there is little research on how international development agencies impact on education in developing countries (Spaulding, 1981). Ideologies persist over time because they are not checked against reality, with the consequence that within a given development agency it is possible to find groups with contrasting beliefs about education and development. Ayres notes that although the President of the Bank (McNamara) championed a war on poverty, technocratic neoliberalism persisted and affected Bank practices. Similar kinds of factions are found within USAID, especially as one goes further from Washington.

For the purpose of this analysis, we can identify three sets of actors within an international agency, each with relationships with counterparts in developing countries. These actors are: those who enter into "policy dialogue" with high level officials in the borrowing countries; program staff and technical advisors, who work with managers and planners in the developing countries; and analysts and researchers, who contribute to the collection, production and dissemination of research and statistics about and to developing countries. The relationships are displayed in Figure 1. These three groups share an organizational membership, but can hold differing

Figure 1. Relationships Between International Agencies and Ministry of Education Officials



Source: Adapted from Cohen and Reiff (1984).

views of education and development needs, as a function of their social background, training, and the relationships they develop with actors in the developing country. An international agency can, therefore, make several contributions to the fitting of research to development needs, but these contributions need not be complementary.

We will focus on the educational policy and practice of the World Bank as an example of the problem of defining the development needs to which educational research should be fitted. We chose to examine the Bank's policy and practice because its loans and grants in education account for about 12 per cent of the total world aid to education by capitalist countries (Hurst, 1981). We look first at how the Bank's policies for education have changed during the past 10 years. Changes in policies are taken as evidence that definitions of education and development needs have changed, at least at the formal level. We then discuss briefly what seem to be contradictions between the Bank's stated policies, and actual practice. We attempt to explain these contradictions by reference to relationships between the three groups of actors within the Bank. The section concludes with comments on the knowledge constraints with which the Bank and other international agencies must work.

The Education Sector Policy of the World Bank

The World Bank published "Education Sector Policy" statements in 1974 and 1980. The 1974 statement was heavily influenced by the state-of-the art in educational research at that time, at least in the sense that much of the "wisdom" contained in the report was considered by critics to be applicable only to the developed countries in which the research had been done. The Bank favored comprehensive high schools, education leading to productive employment, the expansion of

higher education to meet manpower requirements and at the same time was concerned about issues of educational equity. The report was characterized by one critic (Williams, 1975) as "The View from Mt. Olympus" because of its disregard for the operating realities of the countries in which the policies were to be imposed.

By 1980, whether because 1974 policies had failed, or because "conventional wisdom" had changed, the Bank was now emphasizing general over vocational education, basic over secondary and higher education, efficiency as much as or more than equity, and criticizing the concept of manpower forecasting (Psacharopolous, 1981). Much more than in 1974, the Bank had adopted an "economicist" approach to the problems of education and development. Missing in the 1980 Policy paper is that concern with the 'bottom 40 per cent' of the population living in poverty that provoked one critic to describe the 1974 report as "socialist" in orientation (Sheffield, 1976). The same president responsible for the tone of the 1974 policy was by the end of his period in 1981 described by Ayres (1983) as "overtly technocratic." Williams (1981) summarized his view of the 1980 Policy as follows:

> "The human learner is subordinated to the fulfillment of the economic needs of society. This is doubtless why the Bank has such difficulty in communicating with educators, who think in terms of schools, of children, of teachers, of leadership and commitment, of Learning to Be" (1981, p. 149).

He goes on to object that nowhere in the report is the process of learning discussed, except where it is subsumed under a section on the "internal efficiency of education systems." We should look at Williams' observations in terms of their relevance to the problem of fit between researchers and policy makers. In effect he is complaining that the policy does not match the definitions of education held by researchers who are also educators or humanists. Nor, we might add, is the Bank's policy "fitted" by research is

pitched at a psychological level of analysis, that is, focusing on education as a process of transformation of individuals with differences in personal abilities and interests.

Bank Policy, Operations, and Research

Interviews with Bank professionals suggest a chronic tension between the managers and the operations or project staff (see Figure 1). This tension was especially high in the last half of the 1970s when President McNamara insisted on high levels of productivity. Managers define the central mission of the Bank as one of lending money. Productivity is measured in terms of money lent: the more money lent, the more eventual profit for the Bank. The managers are almost exclusively economists. On the other hand, those project officers who do not expect to become managers tend to define the mission of the Bank as promotion of development through loans and technical assistance to needy countries. The insistence on "moving money" over the long-term has meant, according to one Bank professional, less attention to the substantive details of loans, and more to "project payback criteria."

> "The bright young people" (generally trained in economics who tend to fill the management positions in the operating division) "can be more sensitive to the issues, but they are paid for how many loans they make. You make one or two loans a year and you get promoted. But you don't necessarily know what goes on in your projects" (Interview with Project Officer, 1983).

In addition to different operational definitions of the Bank's mission, these two groups also differ in the kinds of relationships they develop with counterparts in the borrowing countries. The policy/management level staff in the Bank make decisions about the total amount of loans to be made to a country during a five-year period. These judgments are made, according to Ayres (1983) with "a

high degree of subjectivity" (p. 70), and often involve "political" criteria. One example during the 1970-1980 period was the Bank's denial of loans to Chile under Allende, but decision to lend to Chile under Pinochet even before the 1979-1981 boom in that country. Some of the qualitative information used in making these decisions comes from high-level policy makers and managers in the governments of the borrowing countries.

The amounts assigned to the countries become the targets that lower-level managers and their project officers must meet. Because large loans take little more work than small loans, there is a tendency to push for large projects rather than small ones. Proposals must meet stringent criteria established by the Bank, the most important being the financial soundnesss of the project as reflected in its rate of return. Project officers commented in interviews on the use of quantitative indicators of both "needs" and project outcomes generally to the exclusion of the humanist criteria of Williams.

There is an element of salesmanship in the loan proposal process, with the project officer motivated to sell both the country and the Bank on the project. Countries vary both in the extent to which they are interested in borrowing money from the Bank at all, and their interest in borrowing for the kinds of "needs" identified in Bank policy statements. The project officer has to find or educate actors within the country that want to borrow money within the Bank's guidelines. Project officers often form alliances with actors in one or another unit in the educational system of the borrowing country government, depending on local circumstances. The project officer looks first for those groups within the system likely to welcome foreign finance and technical assistance, and then develops a

rationale for including this particular project on the menu of those to be financed by the Bank. These alliances may effectively exclude other borrowing country groups from access to Bank loans in education. The fit between research and development needs as defined by high level policy makers in the Bank and in the borrowing country government may be ignored or reshaped in the process of pushing those loans that can be made.

The third group in the Bank may have closer contacts with academic researchers in the United States than with ministry of education officials in borrowing countries. The Bank spent about $11 million on research in education in 1981, but much of this was on projects by analysts and researchers, who do not have the same opportunity as the project officers for knowledge of the borrowing countries. The researchers in the Bank also have limited contacts with the project officers themselves, who are frequently away from the Bank, and when in Washington heavily loaded with paperwork. Although some of the various research units within the Bank have done excellent work, an internal study done in 1981 concluded that "there were insufficient links between operational staff and researchers, especially at the conception and design stages of research" (quoted in Ayres, 1983, p. 30). Some project officers think research is of little use given the kind of tasks they must perform. One professional in the operations division suggested that educational policy research may be interesting, but that it is "common sense" that is most important when discussing loan possibilities with the representatives of a country government.

> "Research on factors related to achievement means little in most developing countries that still lack buildings, or teachers to teach in them. I find little use for even the research done by the Bank itself" (Project Officer, 1983).

Bank researchers may have contacts in borrowing countries with counterparts in universities and private research centers, many of whom were trained in the same North American universities. But they are less likely to have professional contacts with researchers within ministries of education, few of whom have been trained abroad or in the disciplines dominant in the Bank. Most of the borrowing country researchers may know about Bank research through the high quality studies and reviews by Bank staff that are widely circulated. But even a cursory glance at these publications suggests that they are written for a research-sophisticated audience. As a consequence, the Bank sometimes fails to support research efforts in the borrowing countries. The following observation for the English-speaking Caribbean may apply in other settings as well.

> "The pattern has been for international agencies to fund educational research projects that have been consistent with particular themes as determined by the policy of the agency at a particular time. There have been times when the themes being pursued by a particular agency have not been in keeping with the needs of the Caribbean at that time. This has caused problems for educational researchers because, although grants for projects are needed, the funding is not available for the purposes and needs as they have been perceived...
>
> Another consideration is that at times projects have been implemented by agencies that have ignored work being done in that region. Consequently, their efforts have been in advance of the particular stage of development of that activity in the region...The overall result of such activity is the dissipation of effort and extremely limited success" (Miller, 1983, p. 103).

The critical observations we have made are not unknown to the Bank: many of them were recognized in the 1980 Education Sector Policy paper. We feel they help explain why the Bank finds it difficult to follow its own policy guidelines. The 1974 Policy paper projected that about 27 per cent of its loans should go to primary education, 43 per cent to middle level education, and 30 per cent to higher education. Actual spending for the 1975-1978 period showed

that only 14 per cent of loans went to primary education, and 17 per cent to nonformal education, for which no projections were made in the 1974 paper. Higher education received 26 percent of actual lending. With respect to content of education, the Bank had projected that 23 per cent of the Education Sector loans would go to technical and commercial education, but the actual loans amounted to 41 per cent of the total. Agriculture was projected to receive 24 per cent of the loans but received only 11 per cent (Williams, 1981).

These differences can be intepreted in various ways. They could be taken as evidence that Bank project officers have different ideologies than Bank policy makers. They can also be used to show how definitions of the problems of borrowing countries have changed over the past few years. They also imply that it is difficult for the Bank to fit lending policies to lending practices. In any event, it means that in 1980 the Bank found itself in the position of criticizing developing countries for emphasizing secondary and higher education to the detriment of basic education, when those emphases had in part been a result of the Bank's activities.

Comments

The World Bank, like other international aid agencies, is forced to act before it knows fully what to do. It is pressured to make loans to governments dasperate for foreign currency with which to finance new developments in their educational systems. The Bank's self-definition as a self-financing enterprise pushes it to lend money even in circumstances where it might doubt the need for the loan (although never in circumstances where it would doubt the possibility of recovering the loan).

Its policies, therefore, like those of other aid agencies, are not based totally on confirmed scientific knowledge but instead

include unsubstantiated beliefs about reality. At the same time, these policies, to the extent that they shape the actual activities of the Bank, affect that reality. They bring into existence structures, and problems, that did not exist previously and which may not have come into existence without the Bank's action. The problems created may be less severe than the ones resolved--the point being made here is not that the Bank should do nothing, but only that it often acts without full empirical knowledge.

Furthermore, the policies of the Bank may change more rapidly than does our knowledge--as opposed to beliefs--about how education affects development. The contribution of education to development is a long-term process. Bank policies implemented in 1975 cannot be fairly evaluated--in terms of their development consequences--in 1980. But they can, and are, evaluated in terms of their implementablity, and the immediate problems they generate in the countries in which they are implemented. For example, during the early 1970s the Bank was a strong supporter of large, comprehensive high schools, that would provide employment-related training to all students, including those not likely to go on to the university. The comprehensive high school was originally developed in Europe and enthusiastically adopted in the United States. It is now strongly criticized in the U.S. as a tracking system that pushes some children into inferior-status programs that insure that they will not go on to the university. In Latin America, particularly in Colombia, it failed to break down class distinctions. The model of the school, which assumes a number of well-trained guiadance counselors, shop teachers, and other personnel, was inappropriate for the Colombian reality. The schools were expensive to run, and caused political problems for the Colombian government. But it is possible that over the long-term schools of

this kind will make a difference in terms of development. Reduced enthusiasm for comprehensive high schools resulted not from understanding clearly that they would not contribute to long-term development, but that they generated short-term problems, and were no longer well-regarded in the United States.

The Bank, and every other aid agency whose policies specify the kind of education that will lead to development (as defined by the aid agency), faces problems of this kind. In effect, as the critics of the Bank's 1980 policy statement have observed, the aid agency is pressed to be concerned with short-term issues of return on investment, and not long-term contribution to an authentic development that would be marked by interest in "the process of learning." While some persons within the agency may be concerned about fitting educational research to development needs, others (have to) act as if they already know the answers.

Use of Research on Education in Ministries of Education in Latin America

Research on the utilization of educational research in Latin America is limited (Schiefelbein, 1982; Vielle, 1981). Our objective here is not to review that research, but only to describe the complexities of attempting to fit research to development needs. Those complexities originate in the fact that development itself is a complex process, in which a number of actors with competing objectives and definitions of reality are involved. Our objective is describe some of those actors and their relationships, in order to comment on what broad kinds of research methodologies might be most appropriate to increase the fit between research and development needs.

We can divide the relevant actors that influence educational

development into four major categories: policy makers, administrators within the educational bureaucracy, teachers and researchers. Each of these groups is linked to groups outside the educational establishment: education is an open system in Latin America as in the United States. Policy makers, almost always from upper class families and university-educated, are linked with elements in the national political system, such as other government officials, party leaders, representative of capitalist organizations, professional associations, and the like. They are also connected with international development agencies.

The administrators traditionally were trained as teachers in special institutions and were from lower-middle or working class families. In some countries, however, a shift from a bureaucratic to a technocratic mode of organizational control has meant that persons from upper middle class families, trained in other disciplines (such as engineering, architecture, economics), and educated in universities (sometimes in the United States) have assumed top-level management positions. The traditional administrators are more likely to have political loyalties to the teachers' union or other associations of professional educators, while the technocrats are more likely to associate with professionals in their own disciplines (McGinn, Orozco, and Street, 1981). Most primary school teachers in Latin America are trained in secondary-level systems, and most secondary teachers are educated in special teacher colleges. They often are organized into national teacher unions whose leaders have significant influence on the hiring and assignment of teachers.

The identity of researchers within the ministry of education is a function of which group dominates the research and planning unit. Bureaucratic administrators are more likely to rely on educators

trained in research, generally within the country, and with no special formation in social sciences. Technocratic administrators are more likely to hire researchers trained in the social sciences, especially economics, and to use research paradigms from the United States. In the larger ministries, each operating division may have its own research staff, so that within a ministry the researchers can be of several different origins.

In general research for government policy formulation is less likely to be generated outside the government in Latin America than in the United States. Most of the countries have a tradition of university autonomy that provides opposition political groups a base outside of the central government. University life is, in comparison with the United States, much more concerned with political and ideological issues, so that governments look at the products of univerities with askance. Research done in universities is likely therefore to be "denunciatory," to focus on the failings of government policies, but to not suggest how it might be improved (Chiappe and Myers, 1983). In some cases governments form alliances with universities controlled by forces sympathetic to them, and use researchers from these institutions.

What we have atcempted to describe are educational systems that are both more "loosely coupled" (Meyer and Rowan, 1979) than educational systems in the United States, while at the same time more centralized in decision-making. As a result they are highly politicized systems. All the Latin American countries have national systems of education, controlled by a national government, and using a single curricu.um. Even private schools in Latin America (the Caribbean excepted) are controlled to a much higher degree than those in the United States. The centralization of education is a reflection

of the centralization of all political life. State and local political contests, where they exist, are organized along national political party lines, because states and localities have no significant revenue sources of their own. Furthermore, the national governments in Latin America play a larger role in the national economy than does the government in the United States, in some countries accounting for more than 50 per cent of professional employment and capital investment.

Because educational issues also form part of a national political struggle, it is less likely that policies can be resolved on a technical basis. The parties involved in debate on educational policies in Latin America are seldom individual parents or individual teachers, but instead are national associations of teachers, parents, professional groups, business groups, international agencies, the military and others. Each attempts to influence policy by forming alliances within one or more of the four sets of actors within the system. The struggle seldom has clearcut outcomes because in few countries does one group enjoy a clear hegemony over others. Even in those countries with military dictatorship there is a certain degree of instability as the ruling class divides into fractions.

The lack of consensus on core values, the marked degree of social stratification and the penetration of the educational system by interest groups means that it is seldom that "development needs" can be defined in terms that find common acceptance. As a result, several groups organize programs of research on education to fit their particular definition of the country's needs. Several and opposing groups can form even within the ministry of education, in an effort to secure larger budget allocations for their units. This political process is well known in national educational politics in the United

States, of course. And even in the United States educational research is often used primarily to win political power rather than to provide a "scientific" or "value-free" perspective on a problem (Weiss and Gruber, 1984). But policy debates are almost always ideologically-framed in Latin America, and research is much more frequently used to justify positions already taken. The difference between North America and Latin America is at least one of degree.

The political use of research is seen clearly in the history of educational planning. The national governments of Latin America, in part because of the insistence of the United States government and the international aid agencies, rely on national plans to define and present their programs. Every country of Latin America has had during the 1970s at least one educational plan that specified levels of expenditure and numbers of students and teachers for each of the various kinds of educational programs that are offered. The general consensus among even Directors of Offices of Educational Planning in Latin America is that planning has failed (Lamarra, 1983). Because they have ignored the reality of the political organization of the educational system, planners have been unable to use research to develop viable plans.

An analysis of exceptions to this criticism suggests that plans have been implemented in those circumstances in which planners designed research that not only provided technically feasible policies, but which also generated the political support necessary to carry out the policies. Case studies of educational reforms in Chile 1965-1970 (McGinn and Schiefelbein, 1980), El Salvador 1972-76 (McGinn and Warwick, 1980), and Mexico 1976-1981 (McGinn and Street, 1982), show how successful planners used research to develop support for the policies and actions of their clients. This research was

strong on validity rather than reliability. It emphasized sampling of situations rather than sampling of respondents, and generally was done in relatively short periods of time. Much more information was used than had previously been the practice (Schiefelbein, 1983), but much of the information was already available rather than collected by the planners themselves. The planners saw their task as one of enabling their clients to define development needs and possible educational responses together, rather than one of fitting research to development needs previously defined. They defined their objectives as political but based on the use of technical skills. They recognized the importance of mobilizing support for policies at all levels in the system, especially among teachers, and that the most effective mobilization was one that involved those responsible for execution in the design of the task. Although the term was never used by the planners, some of their research projects bore a close resemblance in practice to those now being defined as "action research" and "participatory research."

Comments

There is no simple way to "fit educational research to development needs" in Latin America. Research done in the United States has a low probability of fitting any given defintion of development needs, given their variety in Latin America. Similarly, research done by Latin Americans who overlearned in North American universities may have less chance of fitting someone's view of what is needed. This is so even though the dominant trend in some countries of Latin America is an exclusive dependence on North American research paradigms, particularly the methods of neo-classical economics (and within that human capital approaches). These methods are used by the researchers that accompany into power the new technocrats importing

North American models to "sanitize" Latin American economies. The boom should last as long, and no longer, as the enthusiasm for the new economics (Boeninger, 1982).

There is increasing interest in and use of participatory and action research models in Latin America, even by governments. This is consistent with a shift from "normative" or rationalist planning to "situational" or dialectical planning (Matus, 1978).

Most governments appear to be increasing their capacity to produce research, and/or contracting research from universities and private centers. Prewitt (1982), after commenting that Third World research is more policy-oriented than that done in the United States, also observes this trend toward government control with some concern. His preoccupation is that research designed to generate specific answers for narrow questions will, overtime, lead to a reduced capacity for creative thought and action.

A Few Elements for an Alternative Approach to Educational Research for Development

The rationalist perspective implied in the title of this paper is inappropriate. Research cannot fit development needs except in the particular, and therefore the quest for such a fit is not an appropriate activity for an international development agency, nor for a government that purports to speak for all its people.

A different perspective on development, policy formulation, and research is required to fit the reality of decision-making and action in Latin America. First, development must be defined as a process rather than as a state of being. Development can be understood as progress toward objectives that emerge from a national debate. Economic growth is not an objective, then, but a means toward other, socially more important objectives (such as increased well-being).

Expansion of education similarly is not an objective, although universal education might be considered to be one, albeit not of the same kind as an objective of "an educated people."

Research on development will then look at what actions contribute to movement in the direction of the societal objectives chosen politically rather than scientifically. Most of the important changes--in the sense of direction--occur within short enough periods of time to allow for changes in action. For example, we can tell within the cycle of a year whether a teacher-training program has contributed to reducing dropout rates. Of course not all changes are permanent, so that evaluations of this kind must be done each year, and should be part of a monitoring process built into each system. Most of the ministries of education in Latin America have the technical capacity to do this but have not incorporated this kind of evaluation into their monitoring style.

Latin America has a long history of pilot projects and demonstration schools that have not had any effects on the systems for which they were designed. In general this research has lacked two major components. First it has taken too long a time-perspective, so that results have been fed back after supporters of the reform have left the ministries. Second, the projects have not been accompanied by concern for the problem of generalization. In part this is a result of projects of this kind having been developed through relationships with external agencies rather than resulting from internal pressures. The internal pressures are the more constant, less likely to change with research fads.

The governments of Latin America have shown some awareness of this problem, in the recent "Consensus of Bogota," an agreement among the ministers of education of the various countries to move toward at

least a regionalization of their educational systems (La Educacion, 1982). The countries have responded in various ways, with some moving toward municipalization, others toward state or provincial administration. Only two countries (Costa Rica and Nicaragua) are pursuing local participation in decision-making about educational policy. In some cases, for example Chile, decentralization has meant no more than administrative deconcentration designed to make central governments more efficient without their giving up power to opposition groups (Nunez, 1982).

The international development agencies also promote decentralization. If those agencies define development in static terms, they are likely to promote and use research that helps governments maintain oppressive social structures. Although rationalist paradigms and positivist research methodologies are not in themselves oppressive, they can be used to favor the interests of one particular group over others. Participatory research approaches, on the other hand, at least in principle call for wider involvement in the process of defining the problem (development needs) as well researching possible responses.

The "participatory research" approach that will be needed to fit research to development needs must go beyond the simplistic and nonrigorous efforts at social change that seek to clothe themselves in the legitimacy of research. But itmust also maintain the essential features of the action or participatory research concept: that change is a multi-stage and multi-level process, that research should occur at each stage in the process, and that participants in the change process are generally the best sources of both data and theory about the process. Development requires changes not only in the insights of the mighty, but also in the actions of those who actually do the work

in a society. Research that recognizes the complex web of society is that most likely to fit development needs.

Footnotes

(1)

For additional information, and for a subscription to the bibliographic service, write to CIDE, Casilla 13608, Santiago 1, Chile. An annual subscription that provides about 400 research abstracts, costs US$20. The entire collection of 3000 entries is available on microfiche for US$150.

(2)

On the assumption that most teachers in Latin America are trained at secondary-level institutions.

(3)

When the founders of the Indice went to a major North American Foundation for money to fund the initial operation, they were turned down on the grounds that there were no more than 30 pieces of research on education done by Latin Americans each year (Schiefelbein, 1981).

(4)

It is possible that production of educational research is higher in Chile than in most countries of Latin America, given a long tradition of social science. We have no way of estimating, however, the degree of selection bias introduced into the REDUC Index.

(5)

Principally, the control of most secondary education by universities, the absence of an effective national apprentice trainining system, and its very late adoption of educational planning. Mexico did not receive USAID technical assistance during the period, and has no loans solely to the educational sector from the World Bank.

(6)

One description of this trend and differences between social science in Latin America and the U.S. is Cleary and Garrido-Pinto (1977). See also Boeninger (1982).

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